Title: SYSTEMS AND METHODS FOR CREATING PAGE BASED APPLICATIONS USING DATABASE META DATA

IN THE CLAIMS

Please cancel claims 5, 10, 38 and 43 without prejudice or disclaims and amend the claims as follows:

1. (Currently Amended) A computerized method for creating a page for an application, the method comprising:

reading metadata for a database, the metadata including a constraint definition for at least one column;

translating the metadata into a page definition language, the page definition language including a translation in accordance with the constraint definition; and outputting the page definition language.

- 2. (Original) The computerized method of claim 1, wherein reading metadata includes reading column definitions for the database.
- (Original) The computerized method of claim 2, wherein reading column definitions 3. includes reading a column name and a column data type.
- 4. (Original) The computerized method of claim 2, wherein reading column definitions includes reading a null allowable indicator.
- 5. (Canceled)
- 6. (Original) The computerized method of claim 1, wherein reading metadata includes reading the metadata from a file.
- (Original) The computerized method of claim 1, wherein reading the metadata includes 7. invoking an API function to read the metadata.

8. (Original) The computerized method of claim 1, wherein translating the metadata includes translating a database column type to a page description element type.

- 9. (Original) The computerized method of claim 1, wherein translating the metadata includes translating a foreign key reference to a multi-selectable user interface element.
- 10. (Canceled)
- (Currently Amended) The computerized method of claim [[10]] 1, wherein the at least 11. one constraint comprises a validation rule.
- 12. (Currently Amended) The computerized method of claim [[10]] 1, wherein the at least one constraint comprises an integrity rule.
- 13. (Original) The computerized method of claim 1, wherein the database comprises a relational database.
- 14. (Original) The computerized method of claim 1, wherein the database comprises an object-oriented database.
- 15. (Original) The computerized method of claim 1, wherein the page definition language comprises a ColdFusion scripting language.
- 16. (Original) The computerized method of claim 1, wherein the page definition language comprises Hypertext Markup Language (HTML).
- 17. (Original) The computerized method of claim 1, wherein the page definition language comprises a programming language.

- 18. (Original) The computerized method of claim 17, wherein the programming language comprises a ColdFusion scripting language.
- 19. (Original) A computerized method for creating a page for an application, the method comprising:

receiving a request for a web page;

reading metadata for a database;

translating the metadata into HTML defining the web page; and

sending the web page to the requestor.

20. (Original) A computerized method for creating a page for an application, the method comprising:

receiving a table identifier for a database;

reading metadata for the table from the database;

translating at least one column definition in the metadata into a ColdFusion scripting language;

translating at least one constraint in the metadata into the ColdFusion scripting language; and

outputting the ColdFusion scripting language to a page description file.

- 21. (Original) The computerized method of claim 20, wherein the database comprises a relational database.
- 22. (Currently Amended) A <u>computer-implemented</u> system for creating page descriptions, the system comprising:

a database management system (DBMS) operable to manage a database, the database having metadata, the metadata including a constraint definition for a column; and

a metadata reader operable to read the metadata and translate the metadata into a page description language, the page description language including a translation for the constraint definition.

- (Currently Amended) The computer-implemented system of claim 22, wherein the 23. DBMS comprises a Sybase DBMS.
- (Currently Amended) The computer-implemented system of claim 22, wherein the page 24. description language comprises HTML.
- (Currently Amended) The computer-implemented system of claim 22, wherein the page 25. description language comprises a ColdFusion scripting language.
- (Currently Amended) The computer-implemented system of claim 22, further 26. comprising an application builder operable to read the page description language and generate a web page.
- (Currently Amended) The computer-implemented system of claim 26, wherein the 27. application builder comprises a ColdFusion system.
- (Currently Amended) A computer system operable to generate a page based application, 28. the computer system comprising:

at least one processor;

a memory coupled to the processor; and

an operating environment executed by the at least one processor from the memory, the operating environment comprising:

a database management system (DBMS) operable to manage a database, the database having metadata, the metadata including at least one constraint definition; and a metadata reader operable to read the metadata and translate the metadata into a page description language, the page description language including a translation for the constraint definition.

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29. (Original) The computer system of claim 28, wherein the DBMS comprises a Sybase DBMS.

- 30. (Original) The computer system of claim 28, wherein the page description language comprises HTML.
- 31. (Original) The computer system of claim 28, wherein the page description language comprises a ColdFusion scripting language
- 32. (Original) The computer system of claim 28, further comprising an application builder operable to read the page description language and generate a web page.
- 33. (Original) The computer system of claim 32, wherein the application builder comprises a ColdFusion system.
- 34. (Currently Amended) A computer-readable medium having computer executable instructions for performing a method for creating a page for an application, the method comprising:

reading metadata for a database, the metadata including at least one constraint definition for at least one column;

translating the metadata into a page definition language, the page definition language including a translation in accordance with the at least one constraint definition; and outputting the page definition language.

- 35. (Original) The computer-readable medium of claim 34, wherein reading metadata includes reading column definitions for the database.
- (Original) The computer-readable medium of claim 35, wherein reading column 36. definitions includes reading a column name and a column data type.

AMENDMENT AND RESPONSE UNDER 37 CFR § 1.111

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37. (Original) The computer-readable medium of claim 35, wherein reading column

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definitions includes reading a null allowable indicator.

38. (Canceled)

39. (Original) The computer-readable medium of claim 34, wherein reading metadata

includes reading the metadata from a file.

40. (Original) The computer-readable medium of claim 34, wherein reading the metadata

includes invoking an API function to read the metadata.

41. (Original) The computer-readable medium of claim 34, wherein translating the metadata

includes translating a database column type to a page description element type.

42. (Original) The computer-readable medium of claim 34, wherein translating the metadata

includes translating a foreign key reference to a multi-selectable user interface element.

43. (Canceled)

44. (Currently Amended) The computerized method <u>computer-readable medium</u> of claim

[[43]] 34, wherein the at least one constraint comprises a validation rule.

45. (Currently Amended) The computerized method <u>computer-readable</u> medium of claim

[[43]] 34, wherein the at least one constraint comprises an integrity rule.

46. (Original) The computer-readable medium of claim 34, wherein the database comprises

a relational database.

47. (Original) The computer-readable medium of claim 34, wherein the database comprises

an object-oriented database.

- 48. (Original) The computer-readable medium of claim 34, wherein the page definition language comprises a ColdFusion scripting language.
- 49. (Original) The computer-readable medium of claim 34, wherein the page definition language comprises Hypertext Markup Language (HTML).
- 50. (Original) A computer-readable medium having computer executable instructions for performing a method for creating a page for an application, the method comprising:

receiving a request for a web page;

reading metadata for a database;

translating the metadata into HTML defining the web page; and

sending the web page to the requestor.

51. (Original) A computer-readable medium having computer executable instructions for performing a method for creating a page for an application, the method comprising:

receiving a table identifier for a database;

reading metadata for the table from the database;

translating at least one column definition in the metadata into a ColdFusion scripting language;

translating at least one constraint in the metadata into the ColdFusion scripting language; and

outputting the ColdFusion scripting language to a page description file.

- 52. (Original) The method of claim 51, wherein the database comprises a relational database.
- 53. (Original) A method for receiving a web page, the method comprising:
 issuing a request for a web page to a server, the request including a request for data from a database;

reading metadata for the database;

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translating the metadata into a web page description language; including the web page description language in the web page; and sending the web page.

- 54. (Original) The method of claim 53, wherein the web page description language comprises HTML.
- 55. (Original) The method of claim 53, wherein the web page description language comprises a ColdFusion scripting language.
- 56. (Original) The method of claim 53, wherein the database comprises a relational database.